

1           14. The method of claim 12 wherein curing the composite is commenced while the  
2 electrostatic field is being applied.

1           15. The method of claim 5 wherein applying an electrostatic field comprises  
2 inserting at least one parallel plate capacitor in a bath containing the composite slurry;  
3           adjusting the spacing of plates of the moving the plates of capacitor until the distance  
4 between them is substantially equal to the desired thickness of the thermal intermediate;  
5           connecting the plates of the capacitor to a voltage source  
6           applying an electrostatic field to the slurry between the plates; and  
7           removing the capacitor from the bath.

1           16. A method of fabricating a thermal interface material, the method comprising:  
2           preparing a slurry of carbon nanotubes in a liquid polymer;  
3           dispensing the slurry onto a surface of a conveyor as a layer of unaligned carbon  
4           nanotube composite;  
5           applying an electrostatic field to the layer of unaligned carbon nanotube composite to  
6           form an aligned carbon nanotube composite with the carbon nanotubes substantially  
7           perpendicular to the conveyor; and  
8           curing the aligned carbon nanotube composite.

1           17. The method of claim 16 further comprising subdividing the aligned carbon nanotube  
2 composite into individual billets.

1           18. The method of claim 16 wherein applying the electrostatic field to the layer of unaligned  
2 carbon nanotube composite is performed by placing opposing plates of a capacitor adjacent  
3 opposing sides of the surface of the conveyor bearing the slurry.

1           19. Apparatus for forming a thermal interface structure, comprising:  
2           a vat to store a slurry of carbon nanotubes in a liquid interstitial material;